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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/776,385 | 02/10/2004 | Thomas Heinke | 004-7:FSN 0738 US | 3911 |
| 30080 | 7590 | 04/20/2006 | EXAMINER | |
| LAW OFFICE OF CHARLES E. KRUEGER P.O. BOX 5607 WALNUT CREEK, CA 94596-1607 | | | RATCLIFFE, LUKE D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3662 | |
| DATE MAILED: 04/20/2006 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/776,385 | HEINKE ET AL. | |
| | Examiner | Art Unit | |
| | Luke D. Ratcliffe | 3662 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are accepted by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (5133605) in view of Suzuki (JP02245624).

Referring to **claim 1**, Nakamura shows a system for indicating the location of an energy zone on an object surface with a video subsystem (figure 4), and an optical overlay system (figure 7 Ref 62), but does not show a range finder sub-system.

Suzuki shows a range finder sub-system that is incorporated in a system for indicating the location of an energy zone on an object surface but does not show a video sub-system or an optical overlay sub-system. It would have been obvious to modify Nakamura to include the range finding apparatus because this would allow the device of Nakamura to determine with more accuracy what the energy zone is and be able to overlay a shape outline on the energy zone.

Referring to **claim 3**, it would be obvious with the introduction of the range finding system to Nakamura to have the first axis substantially coincident with the optical axis of the IR optical system so that the laser beam indicates the center of the energy zone.

Referring to **claim 6 and 8**, Nakamura shows a method and a system for indicating the location of an energy zone on an object surface including acquiring an digital image of the object surface (figure 4 and column 1-3), displaying a digital image of the object surface (figure 4 and column 1-3), forming a geometric shape indicating the portion of the object surface indicating the portion of the surface included in the energy zone (figure 7 Ref 62 and column 1-3) and overlaying the geometrical shape over the digital image (figure 7 Ref 62 and column 1-3) but does not show a means for measuring the distance to the object.

Suzuki shows a means for measuring the distance to the object surface but does not shows indicating the location of an energy zone on an object surface including acquiring an digital image of the object surface, displaying a digital image of the object surface, forming a geometric shape indicating the portion of the object surface indicating the portion of the surface included in the energy zone, and overlaying the geometrical shape over the digital image. It would have been obvious to modify Nakamura to include the range finding apparatus because this would allow the device of Nakamura to determine with more accuracy what the energy zone is and be able to overlay a shape outline on the energy zone.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (5133605) in view of Suzuki (JP02245624) as applied to claim 1 above, and further in view of Reifer (5742379).

The combination of Nakamura and Suzuki does not show using a laser diode for emitting a laser-beam and a position-sensitive photodiode with a major surface that is displaced from the first optical axis.

Reifer shows using a laser diode for emitting a laser-beam and a position-sensitive photodiode with a major surface that is displaced from the first optical axis. It would have been obvious to further modify Nakamura to include the laser diode and the photodiode taught by Reifer because these are very common with the implementation of a range finder and has no new or unexpected results.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (5133605) in view of Suzuki (JP02245624) as applied to claim 1 above, and further in view of Akutsu (4739560).

The combination of Nakamura and Suzuki does show an image controller (Nakamura column 2 lines 25-55) but does not show a storage device for storing circle data utilized to form circle images of different diameters.

Akustu shows a storage device for storing circle data utilized to form circle images of different diameters (column 9 lines 48-53) but not an image controller. It would have been obvious to further modify Nakamura to include the storage device taught by Akustu because this allows for faster response time of the apparatus rather

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than calculating the correct diameter of the circle every time, the circle diameter is recalled from memory.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (5133605) in view of Suzuki (JP02245624) as applied to claim 1 above, and further in view of Everest (4494881).

The combination of Nakamura and Suzuki does not show a shape outline being a circle. Everest shows a shape outline being a circle. It would have been obvious to further modify Nakamura to show the outline of the energy to be a circle because this is a common shape of an energy zone to be in and can easily describe to the user where the energy zone is.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (5133605) in view of Suzuki (JP02245624) as applied to claims 1 and 8 above, and further in view of Hosoe (3856399).

The combination of Nakamura and Suzuki does not show a compensating or parallax between two images. Hosoe shows a compensating for parallax between two images (column 7). It would have been obvious to further modify Nakamura to include the parallax compensation taught by Hosoe because this allows for the two different systems to be able to view the same scene even though their optical axis is not the same.

Response to Arguments

Applicant's arguments filed 2/6/06 have been fully considered but they are not persuasive. Nakamura shows an image that is superposed onto another image, the

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definition of superposed is to set or place (one thing) over or above something else, its synonym is to overlay. The system that superposes an image of the infrared camera on to the image of the visible camera is superposing a shape, that the threshold of the temperature that the visible camera cannot take video of defines this shape. Therefore Nakamura does overlay a shape of the energy zone onto a display that is displaying an image of at least part of an object surface that is not included in the energy zone and of as least a part of the object surface that is included in the energy zone (see figures 6A – 6D).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke D. Ratcliffe whose telephone number is 571-272-3110. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LDR


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